

REMARKS/ARGUMENTS

Favorable reconsideration of the present application is respectfully requested.

It is a feature of the claimed invention that, in a process for forming bent glass sheets, glass sheets which have been allowed to sag under gravity and which are advanced on a female former to a male former are pressed at their peripheral region between the female former and the male former while a partial vacuum is applied through the male former, wherein the glass sheets are continuously supported by the female former prior to the pressing step and the application of the partial vacuum commences *after* the upper glass sheet has made contact with the male former. It is a further feature of the claimed invention that the superposed glass sheets remain in contact with the male former under the effect of the partial vacuum after the male and female formers are separated to discontinue pressing.

Claims 13, 14, 16-19, 22 and 23 were rejected under 35 U.S.C. § 103 as being obvious over the newly cited U.S. patent 5,713,976 (Kuster et al) in view of Morin, of record. According to the Office Action, Kuster et al discloses all of the claim features except for raising the female former, the shape of the sag, a separate sag support and the bending temperature, but that Morin provides these features. In particular, the Office Action relied on the description at lines 17-22 of Kuster et al. However, it is nonetheless respectfully submitted that the cited prior art fails to teach: (1) that the application of the partial vacuum commences *after* the upper glass sheet has made contact with the male former, and (2) that the superposed glass sheets remain in contact with the male former after the male and female formers are separated.

As to the first point, the description at lines 6-17 of col. 4 in Kuster et al describes that when a pre-bent pair of glass sheets has reached a position below the upper bending block 11, the upper bending block 11 is lowered until the glass sheets “can be brought by suction against the upper monolithic convex bending block 11,” at which time the pair of glass sheets

are raised by the suction from the lower annular bending ring 3. This portion of Kuster et al thus describes that the upper bending block 11 is lowered while suction is being simultaneously applied.

The noted description at lines 17-22 of col. 4 in Kuster et al mentions a modification of this bending sequence in which the upper bending block 11 is lowered “*through a distance* such that the glass sheet remains in contact with the bending ring 3,” i.e., the upper bending block 11 is lowered through a greater distance so that it prevents the glass sheets from rising off the bending ring 3. *However, the description of this modification does not alter the teaching of the upper bending block 11 being lowered while suction is being simultaneously applied.* That is, there is no teaching in this modification that would alter of the disclosure that the partial vacuum is initiated **before** the upper glass sheet has made contact with the upper bending block 11 – only a modification of the distance by which the upper bending block 11 is lowered. Accordingly, the noted portion of Kuster et al fails to teach: “application of the partial vacuum commences after the upper glass sheet has made contact with the male former.” Moreover since, as discussed in the last response, this is also not taught in Morin, the claims define over Kuster et al in view of Morin.

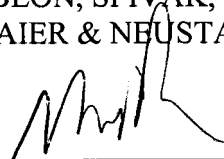
As to the second point, Kuster et al describes: “After the press-bending at the bending station 10, the glass sheets 2” which have assumed their theoretical shape by bending are again placed on the annular bending blocks 3, by means of which they are brought to a cooling station” (col. 4, lines 45-49). That is, the glass sheets are not caused to remain “in contact with the male former under the effect of a partial vacuum” when the pressing step has ended, but are returned to the bending ring or block 3. Morin also does not teach that the glass sheets are caused to remain “in contact with the male former under the effect of a partial vacuum” when the pressing step has ended. For this reason as well, the claims define over Kuster et al in view of Morin.

Concerning the rejection of the dependent Claim 15 under 35 U.S.C. § 103 as being obvious over Kuster et al in view of Morin and Herrington, and the rejection of dependent Claims 20, 21 under 35 U.S.C. § 103 as being obvious over Kuster et al in view of Morin and Balduin et al, it is respectfully noted that these further references also do not teach the application of a partial vacuum commencing after an upper glass sheet has made contact with the male former, or superposed glass sheets remaining in contact with a male former after the male and female formers are separated, and so these further references cannot overcome the shortcomings of Kuster et al in view of Morin with respect to the main claims.

Applicants therefore believe that the present application is in a condition for allowance and respectfully solicit an early Notice of Allowability.

Respectfully submitted,

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